A river is a complex, living thing. Along its length men work to keep it running freely and sweetly.

A healthy river is a blessing to everyone; the nature-lover, the fisherman, the boatman, the farmer, the water supply engineer, the sewage works engineer, to all of us, because without the water we take from it, we could not live.

The freshwater River Thames is one of the best known lengths of river in the world.

The 140 mile stretch from its source above Cricklade in Wiltshire down to Teddington to the west of London provides a wealth of recreation opportunites.

Throughout the year and especially during the summer months, thousands of pleasure craft are afloat cruising, sailing, rowing and canoeing. Children and adults can be seen fishing along the bank.

Families out for the day or on holiday use the towpaths and fields to picnic, walk or sit and take in the scenery.

The river passes through some very well-known towns and areas – Oxford, Abingdon, Marlow, Maidenhead, Windsor and Runnymead, and is the venue for international events such as the Henley Regatta. Great houses, monuments and historic sites can be found throughout its length.

Less evident, but just as important, are the gifts Nature itself has given to the river – birds, fish and flowers. The freshwater Thames is richly endowed and what it has is there to be enjoyed by everyone.

The fish, birds and flowers listed in this leaflet (except where marked) can be found in and about the area of the length of the freshwater river.

It is not possible, in a leaflet of this size, to include every species which you may find; therefore, only those whose habitat is primarily river-based are listed.

NRA

National Rivers Authority

Thames Region

Kings Meadow House, Kings Meadow Road
Reading, Berkshire RG1 8DQ
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NATURE AND THE FRESHWATER RIVER THAMES

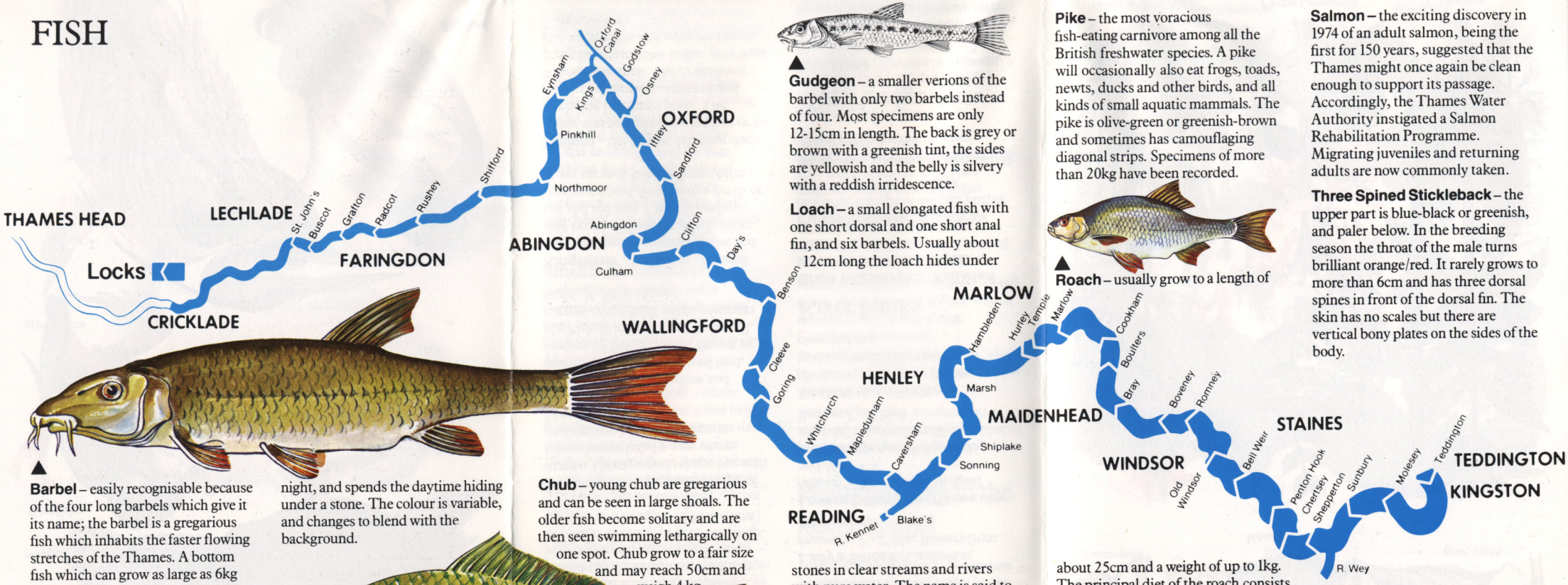
Please remember:

Under the Wildlife and Countryside Act:

- *Wild flowers should not be picked or damaged.*
- *Birds should not be interfered with; nests must not be disturbed nor eggs taken or broken.*
- *Fish can be caught only by approved methods, under the NRA, Thames Region, byelaws.*
- *Remember the country code at all times.*

NRA

FISH

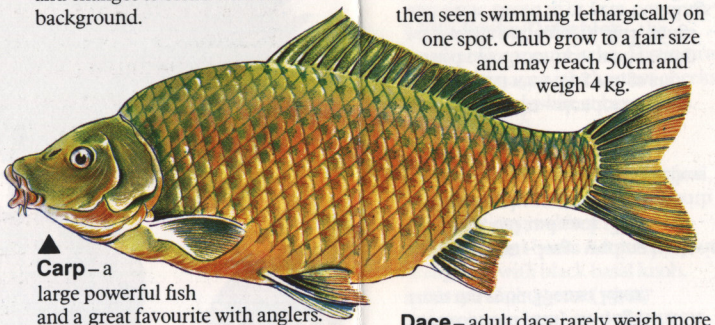


▲ **Barbel** – easily recognisable because of the four long barbels which give it its name; the barbel is a gregarious fish which inhabits the faster flowing stretches of the Thames. A bottom fish which can grow as large as 6kg and measure up to 90cm.

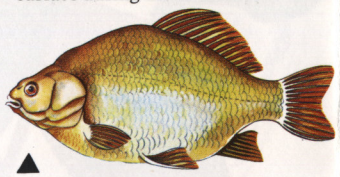
▲ **Bleak** – rarely grows to more than 20cm and lives in large shoals near the surface. Feeds almost entirely on plankton but also eat flying insects that may happen to land on the surface. Bleak spawn intermittently from April into July in shallow, gravelly places.

Bream – the most hump-backed of our freshwater fishes and may grow to 75cm and weight as much as 6kg. In spite of being well scaled, the bream is a very slimy fish. The name dates back to the twelfth century, possibly derived from a Teutonic word meaning to glitter.

Bullhead – the bullhead, or miller's thumb, is a small freshwater member of a family with many marine representatives. Rarely exceeds 10cm and lives on the river bed feeding on small crustacea. Feeds mainly at night, and spends the daytime hiding under a stone. The colour is variable, and changes to blend with the background.



▲ **Carp** – a large powerful fish and a great favourite with anglers. Essentially a bottom feeder but can often be spotted basking on the surface during the summer.



▲ **Crucian Carp** – like the common carp, is not a native of Britain, but originally came from Asia. Can grow up to 2½kg in weight and usually have dark green hump-backs. They feed on small animals and vegetation obtained by rooting about on the bottom.

Chub – young chub are gregarious and can be seen in large shoals. The older fish become solitary and are then seen swimming lethargically on one spot. Chub grow to a fair size and may reach 50cm and weigh 4 kg.

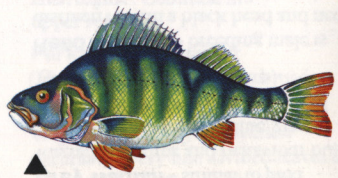
Dace – adult dace rarely weigh more than 300gm and are a very lively species which dart around together in the upper waters. Dace feed on larvae, plankton crustacea, worms and snails, and only rarely on vegetable material.

Eel – the common eel differs from most other migratory fish in that it leaves the river to spawn. Eels breed in the Sargasso Sea at a point half way between Bermuda and the Leeward Islands. The Thames now sees a large upriver migration of elvers, which passes through the central London area in June. The mature silver eels leave the Thames during the last week in October and the first in November.

▲ **Gudgeon** – a smaller verions of the barbel with only two barbels instead of four. Most specimens are only 12-15cm in length. The back is grey or brown with a greenish tint, the sides are yellowish and the belly is silvery with a reddish irridescence.

Loach – a small elongated fish with one short dorsal and one short anal fin, and six barbels. Usually about 12cm long the loach hides under stones in clear streams and rivers with pure water. The name is said to come from the French word "locher", meaning to fidget – and loaches are said to foretell the approach of the thunderstorm by growing restless 24 hours before a storm.

Minnow – in Britain minnows rarely exceed 10cm. Minnows prefer the well oxygenated water of fast-flowing rivers and will leap out of a badly aerated aquarium. This is the fate of many specimens that result from children's fishing excursions.



▲ **Perch** – perch are sedentary fish and do not perform any extensive migrations. Perch have five to nine vertical dark stripes along both sides of the body. Anglers should avoid the spines in the perch's dorsal fins.

Pike – the most voracious fish-eating carnivore among all the British freshwater species. A pike will occasionally also eat frogs, toads, newts, ducks and other birds, and all kinds of small aquatic mammals. The pike is olive-green or greenish-brown and sometimes has camouflaging diagonal strips. Specimens of more than 20kg have been recorded.

▲ **Roach** – usually grow to a length of about 25cm and a weight of up to 1kg. The principal diet of the roach consists of larvae, molluscs, crustaces and adult insects. The spawning season for roach is in May or early June.

Rudd – is very similar to the roach in its external appearance but the mouth is more upturned in the rudd. It grows to a length of 30cm and its back is a dark combination of brown, blue or green and shades to metallic silver on the sides.

Ruffe – the ruffe or pope is a small and drab relative of the perch. The ruffe has similar colourings but is less hump-backed than the perch. The average length is usually about 15cm and rarely weighs more than 100 grams. The fish is very fertile; a ruffe of 18.7cm has been reported to contain 104,000 eggs.

Salmon – the exciting discovery in 1974 of an adult salmon, being the first for 150 years, suggested that the Thames might once again be clean enough to support its passage. Accordingly, the Thames Water Authority instigated a Salmon Rehabilitation Programme. Migrating juveniles and returning adults are now commonly taken.

Three Spined Stickleback – the upper part is blue-black or greenish, and paler below. In the breeding season the throat of the male turns brilliant orange/red. It rarely grows to more than 6cm and has three dorsal spines in front of the dorsal fin. The skin has no scales but there are vertical bony plates on the sides of the body.

Tench – a stocky bottom living fish which grows to 30cm in length. The fertility of the tench is enormous and an adult female can lay 800,000 eggs.

Brown Trout – a member of the salmon family and, providing the water is clean, adaptable to a wide range of conditions. Trout may grow to a length of over 100cm.

▲ **Rainbow Trout** – this fish was introduced to Britain from north-western America. Easily recognised by a broad purple band along the sides, and a tail-fin spotted with black. The maximum size is about 60-70cm, and the rod record is a weight of about 9kg.

BIRDS

Canada Goose – much larger than other black necked geese; long black neck with generally brownish plumage, and small white markings on tail. 92-102cms (36-40ins).

Coot – the only all black bodied waterfowl, it has a white forehead and bill and green legs. 38cms (15ins).

Moorhen – similar shape and size to the coot. Red forehead and white under tail; white line along flank with dark brown above and dark grey below. White markings on tail make the moorhen easily distinguishable from the coot. 33cms (13ins).

Grey Heron – large wading bird with long legs, bill and neck. The commonest heron, mainly grey with white head, neck and breast; yellow bill and legs. 90cms (36ins).

House Martin – slender short necked bird with long wings and forked tail. Prominent white rump with white underparts, dark wings and back. Breed in or near buildings, on cliffs and bridges. 12.5cms (5ins).

Sandmartin – the smallest type of martin. Characteristic shape but with brown breast band across white underparts; brown upperparts. 12 cms (4¾ ins).

Swift – resembles swallow and martin but is the most aerial bird, feeding on flying insects. Brown or blackish plumage, short fluted tail, narrow raked-back wings, vigorous flight. 16.5cms (6½ins).

Kingfisher – brilliantly coloured with blue-green plumage above and mid brown below; black bill, short tail and red legs. Lives in lowland freshwater and dives from a perch or hover to catch fish. 16.5cms (6½ins).

Mallard – the largest dabbling duck (those which feed on the surface or by upending but rarely dive). The mallard is the most common and widespread duck. The drake has a green head, a narrow collar, grey beak and underparts and a purple breast. 58cms (23ins).

Teal – the smallest dabbling duck in the region. Drake has chestnut head with distinctive green stripe from eye to neck; horizontal white line above grey wing and yellow patch under tail. 35cms (14ins).

Pochard – the pochard (Aythya) family are the most expert of diving ducks, diving frequently and swimming submerged. Shorter necked and more compact than dabbling ducks. Adult male has chestnut neck and head, grey upperparts, chest and rump dark grey/black, blue/grey bill with black at tip and base 46cms (18ins).

Tufted Duck – member of the pochard family. Drake, easily distinguishable by black drooping crest, black upperparts and white flanks; bill blue/grey and yellow eye. 43cms (17ins).

Great Crested Grebe – winter plumage dark above and white below. Breeding adults have distinctive dark double-horned crest with rufous cheeks: often holds neck erect when at rest. Dives for food and can travel submerged for several yards. 48cms (19ins).

Little Grebe/Dabchick – the smallest European Grebe. Distinctive brown plumage with chestnut cheeks and throat and white at base of bill. 27cms (10½ins).

Mute Swan – the largest waterfowl, all white with a long neck, narrow pointed wings, webbed feet and flattened blunt beak. Adult has orange bill with black basal knob, holds tail slightly erect when swimming and makes a loud throbbing of wings when in flight; has a trumpeting call and will hiss when annoyed. 152cm (61 ins).

Cormorant – the largest all-dark plumage aquatic diving bird in the region; long neck, hooked bill, long tail and webbed feet. Yellow patch at base of bill and white patch on face. 90cms (36ins).

Pied Wagtail – plumage is a combination of grey, white and black. The pied wagtail has a black breast, back and rump, the remainder being grey to white. Characteristic is the long tail which repeatedly wags up and down. 18cms (7ins).

Yellow Wagtail – similar in shape to the pied wagtail but with yellow face, chest and underparts and grey and white above with dark grey tail. 16.5cms (6½ins).

Grey Wagtail – similar to pied wagtail in outline and behaviour but with much longer tail. Blue/grey above with yellow/green rump and yellow beneath. 18cms (7ins).

Reed Bunting – breeding male is distinctive with a black head and neck with a white moustache-like streak. Back and wings rustic brown. Tail constantly flicks. 15cms (6ins).

Reed Warbler – warblers are in general a difficult group of birds from which to identify individual species. Reed warbler is similar in size 12.5cms (5ins) and colouring to Marsh, Paddyfield, and Blyths Reed Warbler.

FLOWERS

Watermeadows

Lady's Smock *(Cardamine pratensis)* 1′–2′ lilac flowers from April to June

Lesser Celandine *(Ranunculus ficaria)* yellow flowers in April and May

Meadowsweet *(Filipendula ulmaria)* masses of small white flowers 2′–4′ high

Snake's Head Fritillary *(Fritillaria meleagris)* flowers in May in damp meadows, rare due to over-picking

River banks

Great Willow Herb *(Epilobium hirsutum)* tall stems with pink or white flowers in July

Purple Loosestrife *(Lythrum salicaria)* clumps of tall red/purple spikes from June to August

Skullcap *(Scutellaria galericulata)* blue flowers, 1′ high

Water's edge

Brooklime *(Veronica beccagunga)* a blue flowered water speedwell

Bur-reed *(Sparganium erectum)* – very common along the main river banks. Widespread Cricklade – Teddington

Flowering Rush *(Butomus umbellatus)* – flowers July to September, not a common plant but found in the upper reaches of the river

Great or Water Chickweed *(Myosoton aquaticum)* low growing plant with white flowers

Great Water Dock *(Rumex hydrolaphatum)* – conspicuous by its very large leaves, flowers June-August. Common, widespread

Sweet Flag *(Acorus calamus)* – inconspicuous flowers, leaves smelling of tangerine when bruised. Not seen upstream of Oxford

Reed *(Phragmites communis)* – a tall grass, all the leaves point one way in the wind, used in thatching. Common, widespread.

Reed Mace *(Typha latifolia)* – also known as Cat's tail. Not seen upstream of Oxford

Yellow Flag *(Iris pseudacorus)* – widespread but growing habit sparse, bright yellow flowers, May-July

Plants growing in the main channel

Amphibious Bistort *(Polygonum amphibium)* – glossy floating leaves with spikes of pink flowers from June-September. Widespread

Arrow-head *(Sagittaria sagittifolia)* – the emergent leaves only have the characteristic arrow-shape, flowers in June-July. More frequent in upper reaches

Bulrush *(Schoenoplectus lacustris)* – common, widespread Cricklade – Teddington. Flowers June and July

Fennel-leaved Pondweed *(Potamogeton pectinatus)*, thread-like leaves, inconspicuous flowers in June and August . Common in upper reaches.

Perfoliate Pondweed *(Potamogeton perfoliatus)* – broad leaves, flowers July-August

Water Milfoil *(Myriophyllium spicatum)* – very fine divided leaves in whorls of 4. Occasional in upper reaches

Yellow Water Lily *(Nuphar lutea)*, large yellow flowers June to August, underwater leaves are cabbage-like. Common, widespread